## CHALCIDOIDEA BRED FROM *GLOSSINA* IN THE NORTHERN TERRITORIES, GOLD COAST.

## By JAMES WATERSTON, B.D., B.Sc., Lieut. R.A.M.C.

The material on which the following report is based was received by the Imperial Bureau of Entomology some months ago, but without any note as to the host attachment of the examples forwarded or any other indication of their special importance. For this reason the two species of Chalcids recorded below remained unworked for some time. A more recent letter from Dr. J. J. Simpson disclosed the interesting fact that both had been bred from puparia of *Glossina*; and although I am unable at present to deal fully with them, it seems advisable to publish some notes and a preliminary description of one species which seems certainly new.

## Dirhinus inflexus, sp. nov.

 $\bigcirc$ . Head, thorax and abdomen black; the flattened setae on head (superiorly) and thoracic notum yellow, but whitish on genae. Fore wings brown-tinted, veins a little darker. Fore and mid coxae and hind legs (except the tarsi) black; fore

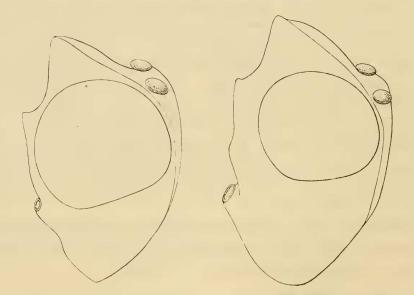


Fig. 1. Lateral view of the heads of Dirhinus ehrhorni, Silv. (left) and D. inflexus, Waterst. (right).

and mid legs otherwise brown; hind tarsi the same but paler. Tip of ovipositor sheath brown. Antennae brown, more or less infuscated, especially on the funicle, but paler at the tip.

Length,  $3\frac{1}{2}$  mm; alar expanse,  $5\frac{1}{2}$  mm.

Type  $\mathcal{Q}$  in the British Museum.

GOLD COAST: Larabanga, N. Territories, 1-6. vii. 1916 (Dr. J. J. Simpson).

D. inflexus is closely related to D. giffardi, Silv. (Boll. Lab. Zool. Portici, viii, p. 128, figs. liii-lvi, 28th Nov., 1913), and D. ehrhorni, Silv. (ib., p. 132, figs. lvii-lviii), both of which were described from Southern Nigeria, where they attack fruit-flies of the genus Ceratitis. In D. giffardi the wings are nearly hyaline, the antennae

much redder and darker apically, while in profile the frons from the insertion of the antennae to the extremity of the large process is straight. There are other differences in the propodeal sculpture. From D. *ehrhorni* the new species differs in the colour of the antennae and in the profile—particularly in the size of the eye (see fig. 1).

For these drawings I desire to express my cordial thanks to Prof. F. Silvestri, who has obligingly compared the types of *inflexus* and *ehrhorni* with one another, finding, as he notes, that in the *Glossina* parasite the frontal processes are longer and the sculpture of the dorsum coarser.

## Chalcis amenocles, Walker.

Chalcis amenocles, Walker, List. Hym. Brit. Mus. Chalcid, i, p. 84, 1846 (Sierra Leone).

The following three series were received from the Gold Coast, N. Territories (Dr. J. J. Simpson) := (a) 7 33, 9 99, without data, 1916; (b) 2 99, Larabanga, 1-8.vii.1916; (c) 1 3, 3 99, Yapi, vi.1916. There is also a single 3 sent without data by Dr. Simpson amongst a miscellaneous lot of captured insects. The 99 range in size from about 4 mm. long, with an expanse of  $5\frac{1}{2}$  mm., to  $5\frac{1}{2}$  mm. long, with an expanse of  $8\frac{1}{3}$  mm. The 33 are  $4\frac{1}{4}-4\frac{1}{2}$  mm. long, with an expanse of  $6\frac{1}{2}$  mm. or over.

I have placed the above examples of *Chalcis* together and under the name *amenocles* with some hesitation. In the *amenocles* group several more or less distinct forms have already been described from South Africa, e.g., *capensis*, Cam. (1905), *spilopus*, Cam. (1905), *transvaalensis*, Cam. (1911), and *varipes*, Wlk. (1871). These seem to me to differ very little, except in size, from one another, but it has not been possible to make a critical examination of the mouth-parts in each case. Until this has been done the status of these forms must remain undecided.